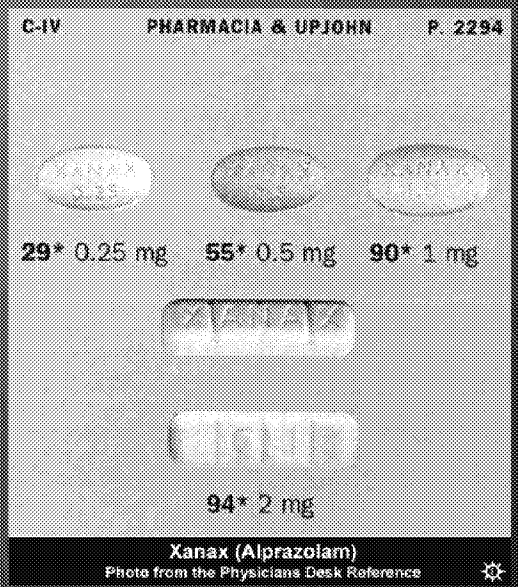
Alprazolam Xanax® (Z-bars)

C-IV

- Drug abusers often prefer alprazolam due to its rapid onset and longer duration of action
- Alprazolam was ranked third in the number of prescriptions for controlled substances in 2003, 2004, 2005 and 2006*
- For all sales of generic pharmaceuticals, alprazolam was ranked 7th**

* Source IMS Health
** Source Verispan VONA



Stimulants

Amphetamine Salts C-II

- Adderall C-II

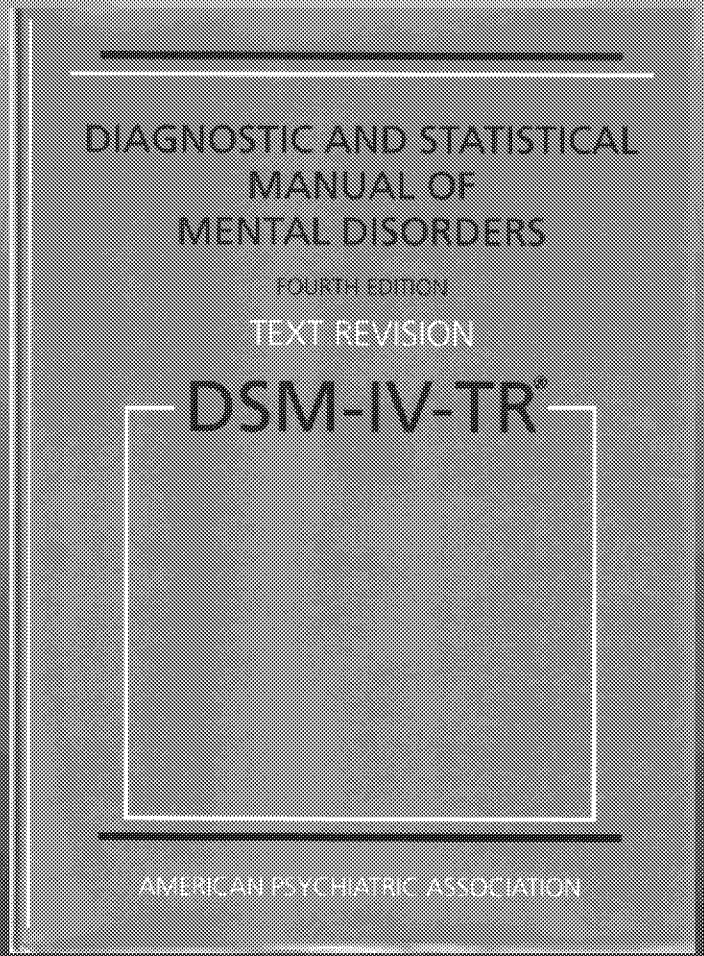
Methylphenidate C-II

- Ritalin®
- Concerta®

Ritalin® / Concerta® / Adderall

- Used legitimately to treat ADHD
- Used non-medically to get high and as an academic "performance-enhancer" to improve memory and improve concentration – gain the edge
  - Higher GPA
  - Higher SAT / ACT score
  - Get that scholarship

REQUIRED READING



Attention-Deficit and Disruptive Behavior Disorders

Attention-Deficit/Hyperactivity Disorder

Diagnostic Features

Some hyperactive-impulsive or inattentive symptoms that cause impairment must have been present before age 7 years, although many individuals are diagnosed after the symptoms have been present for a number of years, especially in the case of individuals with the Predominantly Inattentive Type (Criterion B)

A1c). There may be frequent shifts from one uncompleted activity to another. Individuals diagnosed with this disorder may begin a task, move on to another, then turn to yet something else, prior to completing any one task. They often do not follow through on requests or instructions and fail to complete schoolwork, chores, or other duties (Criterion A1d). Failure to complete tasks should be considered in making this diagnosis only if it is due to inattention as opposed to other possible reasons (e.g., failure to understand instructions, defiance). These individuals often have difficulties organizing tasks and activities (Criterion A1e). Tasks that require sustained mental effort are experienced as unpleasant and markedly aversive. As a result, these individuals typically avoid or have a strong dislike for activities that demand sustained self-application and mental effort or that require organizational demands or close concentration (e.g., homework or paperwork) (Criterion A1f). This avoidance must be due to the person's difficulties with attention and not due to a primary oppositional attitude, although secondary oppositionalism may also occur. Work habits are often disorganized and the materials necessary for doing the task are often scattered, lost, or carelessly handled and damaged (Criterion A1g). Individuals with this disor-

- Fails to give close attention to details...make careless mistakes in schoolwork, work
- Difficulty sustaining attention in tasks
- Does not seem to listen when spoken to
- Does not follow through on instructions
- Difficulty organizing tasks
- Often loses things necessary for tasks
- Easily distracted
- Forgetful

(h) is often easily distracted by extraneous stimuli
(i) is often forgetful in daily activities

(2) six (or more) of the following symptoms of **hyperactivity-impulsivity** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity
(a) often fidgets with hands or feet or squirms in seat
(b) often leaves seat in classroom or in other situations in which remaining

- Fidgets
- Can't remain seated
- Restlessness
- Difficulty awaiting turn
- Often interrupts or intrudes

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

There are no laboratory tests, neurologocal assessments,or attentional assessments that have been established as diagnostic in the clinical assessment of Attention-Deficit/Hyperactivity Disorder

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with successful treatment. On average, individuals with Attention-Deficit/Hyperactivity Disorder obtain less schooling than their peers and have poorer vocational achievement. Also, on average, intellectual level, as assessed by individual IQ tests, is several points lower in children with this disorder compared with peers. At the same time, great variability in IQ is evidenced: individuals with Attention-Deficit/Hyperactivity Disorder may show intellectual development in the above-average or gifted range. In its severe form, the disorder is markedly impairing, affecting social, familial, and scholastic adjustment. All three subtypes are associated with significant impairment. Academic deficits and school-related problems tend to be most pronounced in the types marked by inattention (Predominantly Inattentive and Combined Types), whereas peer rejection and, to a lesser extent, accidental injury are most salient in the types marked by hyperactivity and impulsivity (Predominantly Hyperactive-Impulsive and Combined Types). Individuals with the Predominantly Inattentive Type tend to be socially passive and appear to be neglected, rather than rejected, by peers.

A substantial proportion (approximately half) of clinic-referred children with Attention-Deficit/Hyperactivity Disorder also have Oppositional Defiant Disorder or Conduct Disorder. The rates of co-occurrence of Attention-Deficit/Hyperactivity Disorder with these other Disruptive Behavior Disorders are higher than with other mental disorders, and this co-occurrence is most likely in the two subtypes marked by hyperactivity-impulsivity (Hyperactive-Impulsive and Combined Types). Other associated disorders include Mood Disorders, Anxiety Disorders, Learning Disorders, and Communication Disorders in children with Attention-Deficit/Hyperactivity Disorder. Although Attention-Deficit/Hyperactivity Disorder appears in at least 50% of clinic-referred individuals with Tourette's Disorder, most individuals with Attention-Deficit/Hyperactivity Disorder do not have accompanying Tourette's Disorder. When the two disorders coexist, the onset of the Attention-Deficit/Hyperactivity Disorder often precedes the onset of the Tourette's Disorder.

There may be a history of child abuse or neglect, multiple foster placements, neurotoxin exposure (e.g., lead poisoning), infections (e.g., encephalitis), drug exposure in utero, or Mental Retardation. Although low birth weight may sometimes be associated with Attention-Deficit/Hyperactivity Disorder, most children with low birth weight do not develop Attention-Deficit/Hyperactivity Disorder, and most children with Attention-Deficit/Hyperactivity Disorder do not have a history of low birth weight.

Associated laboratory findings. There are no laboratory tests, neurological assessments, or attentional assessments that have been established as diagnostic in the clin-

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There are no specific physical features associated with Attention-Deficit/Hyperactivity Disorder, although minor physical anomalies (e.g., hypertelorism, highly arched palate, low-set ears) may occur at a higher rate than in the general population. There may also be a higher rate of accidental physical injury.

Specific Culture, Age, and Gender Features

Attention-Deficit/Hyperactivity Disorder is known to occur in various cultures, with variations in reported prevalence among Western countries probably arising more from different diagnostic practices than from differences in clinical presentation.

It is difficult to establish this diagnosis in children younger than age 4 or 5 years, because their characteristic behavior is much more variable than that of older children and may include features that are similar to symptoms of Attention-Deficit/Hyperactivity Disorder. Furthermore, symptoms of inattention in toddlers or preschool children are often not readily observed because young children typically experience few demands for sustained attention. However, even the attention of toddlers can be held in a variety of situations (e.g., the average 2- or 3-year-old child can typically sit with an adult looking through picture books). Young children with Attention-Deficit/Hyperactivity Disorder move excessively and typically are difficult to contain. Inquiring about a wide variety of behaviors in a young child may be helpful in ensuring that a full clinical picture has been obtained. Substantial impairment has been demonstrated in preschool-age children with Attention-Deficit/Hyperactivity Disorder. In school-age children, symptoms of inattention affect classroom work and academic performance. Impulsive symptoms may also lead to the breaking of familial, interpersonal, and educational rules. Symptoms of Attention-Deficit/Hyperactivity Disorder are typically at their most prominent during the elementary grades. As children mature, symptoms usually become less conspicuous. By late childhood and early adolescence, signs of excessive gross motor activity (e.g., excessive running and climbing, not remaining seated) are less common, and hyperactivity symptoms may be confined to fidgetiness or an inner feeling of jitteriness or restlessness. In adulthood, restlessness may lead to difficulty in participating in sedentary activities and to avoiding pastimes or occupations that provide limited opportunity for spontaneous movement (e.g., desk jobs). Social dysfunction in adults appears to be especially likely in those who had additional concurrent diagnoses in childhood. Caution should be exercised in making the diagnosis of Attention-Deficit/Hyperactivity Disorder in adults solely on the basis of the adult's recall of being inattentive or hyperactive as a child, because the validity of such retrospective data is often problematic. Although supporting information may not always be available, corroborating information from other informants (including prior school records) is helpful for improving the accuracy of the diagnosis.

Lisdexamfetamine (Vyvanse®)

- Lisdexamfetamine is a new chemical entity consisting of d-amphetamine (schedule II) covalently bound to the amino acid, L-lysine.
- Lisdexamfetamine per se is pharmacologically inactive.
- Upon oral ingestion, the lysine moiety is cleaved in the gastrointestinal system releasing d-amphetamine. Thus, lisdexamfetamine is a "pro-drug" for d-amphetamine.
- Pharmacology and abuse potential of lisdexamfetamine are similar to d-amphetamine.

Methods of Diversion

- Practitioners / Pharmacists
  - Illegal distribution
  - Self abuse
  - Trading drugs for sex
- Employee pilferage
  - Hospitals
  - Practitioners' offices
  - Nursing homes
  - Retail pharmacies
  - Manufacturing / distribution facilities
- Pharmacy / Other Theft
  - Armed robbery
  - Burglary (Night Break-ins)
  - In Transit Loss (Hijacking)
  - Smurfing
- Patients / Drug Seekers
  - Drug rings
  - Doctor-shopping
  - Forged / fraudulent / altered prescriptions
- The medicine cabinet / obituaries
- The Internet
- Pain Clinics

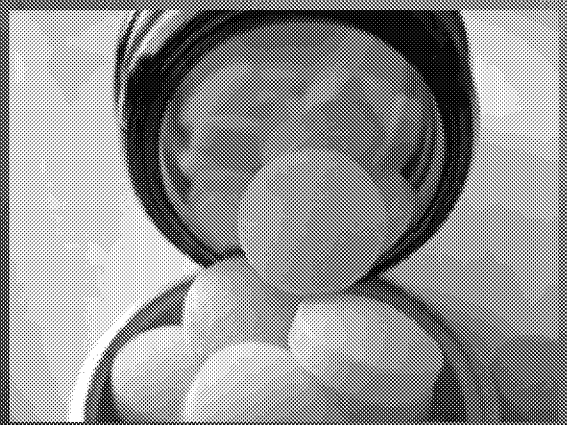
Where are the Pharmaceuticals Coming From?

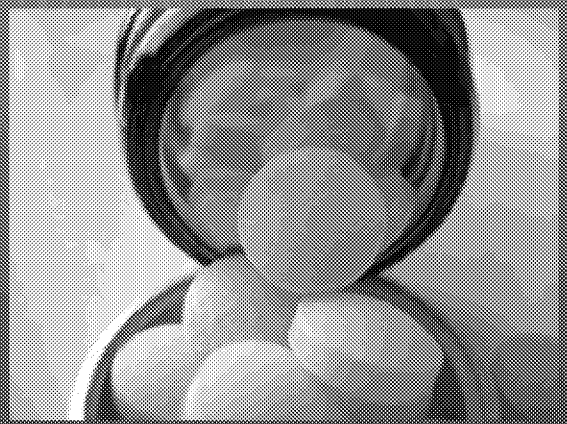
- Friends and Family for Free
- Medicine Cabinet
- Doctor Shopping
- Internet
- Pain Clinics

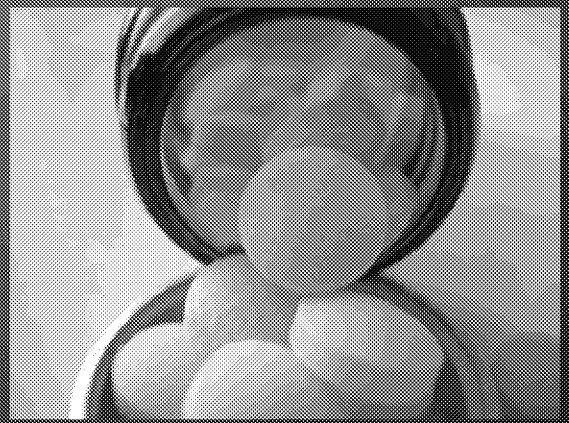
Prescription Fraud

- **Fake prescriptions**
  - Highly organized
  - Use real physician name and DEA Registrant Number
    - Contact Information false or "fake office"
      - (change locations often to avoid detection)
  - Prescription printing services utilized
    - Not required to ask questions or verify information printed
- **Stolen prescriptions**
  - Forged
  - "Smurfed" to a large number of different pharmacies

Doctor Shopping

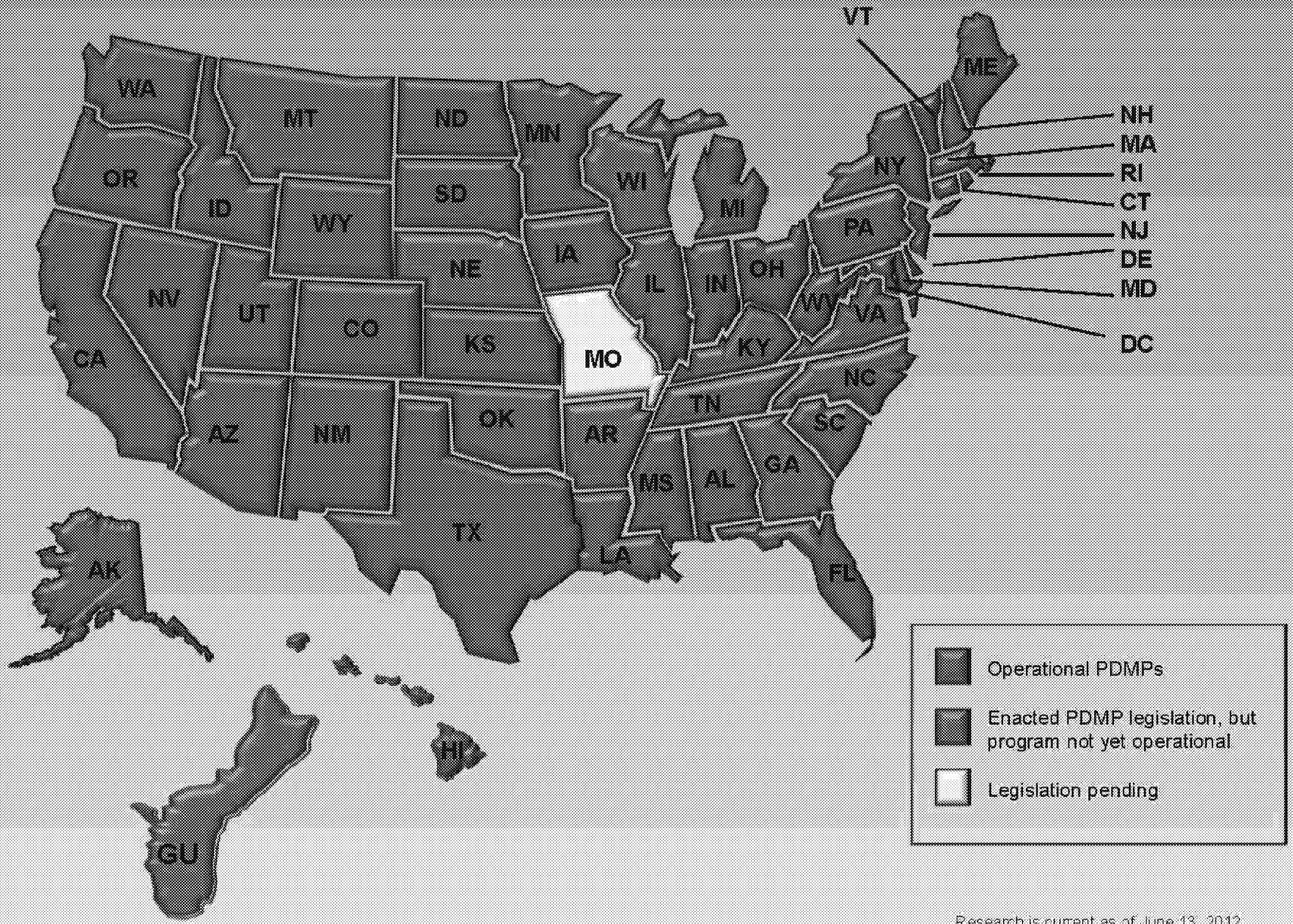






Prescription Drug Monitoring Programs

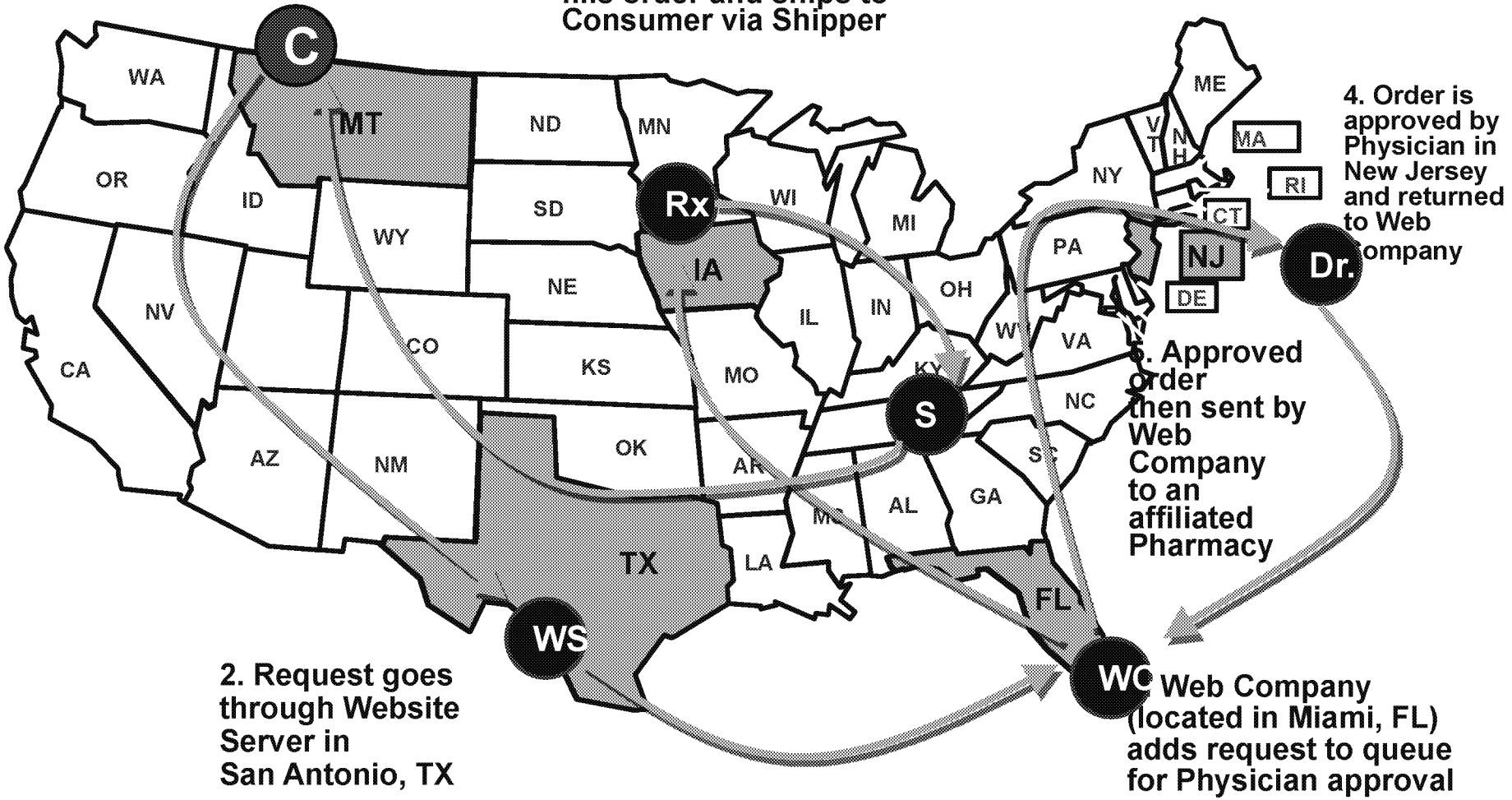
Status of Prescription Drug Monitoring Programs (PDMPs)



Research is current as of June 13, 2012

Diversion via the Internet

Domestic 'Rx' Flow



Purchases of Hydrocodone by Known and Suspected Rogue Internet Pharmacies

January 1, 2006 – December 31, 2006

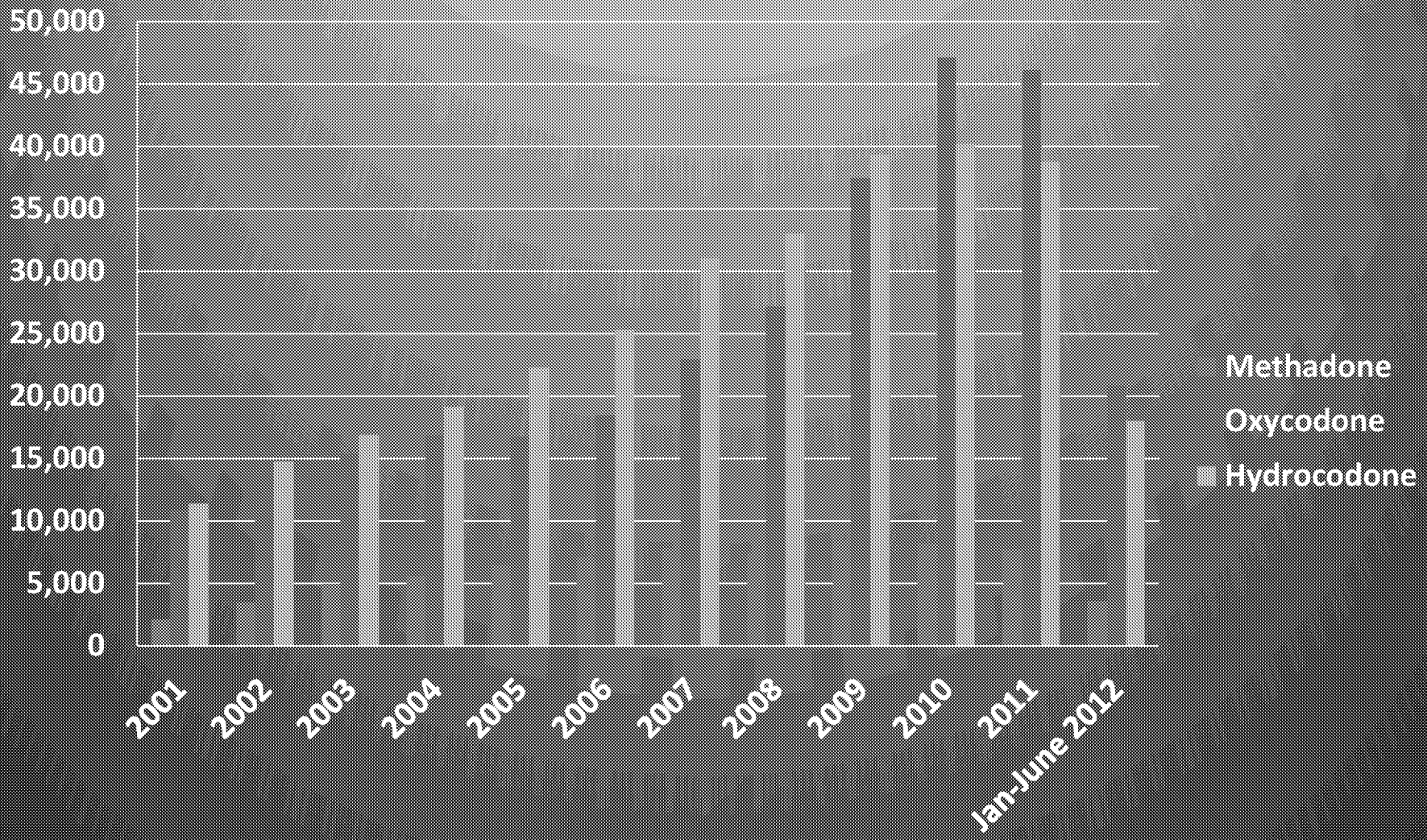
1			Hillsborough	TAMPA	FLORIDA	33614	15,596,380
2			Pinellas	CLEARWATER	FLORIDA	33765	9,077,84
3			Hillsborough	TAMPA	FLORIDA	33614	8,760,976
4			Baltimore City	BALTIMORE	MARYLAND	21213	5,876,300
5			Hillsborough	TAMPA	FLORIDA	33619	5,718,200
6			Jefferson	RIVER RIDGE	LOUISIANA	70123	4,892,900
7			Hillsborough	TAMPA	FLORIDA	33634	4,733,250
8			Polk	LAKELAND	FLORIDA	33813	4,564,480
9			Hillsborough	TAMPA	FLORIDA	33612	4,220,840
10			Pinellas	CLEARWATER	FLORIDA	33759	3,819,320
11			Hillsborough	TAMPA	FLORIDA	33610	3,044,160
12					FLORIDA	33809	3,039,490
13						70123	2,750,000
14						34652	2,664,120
15						33613	1,902,900
16						33801	1,725,020
17					FLORIDA	33612	1,619,765
18			Hillsborough	TAMPA	FLORIDA	33604	1,570,350
19			Pinellas	TARPON SPRINGS	FLORIDA	34689	1,464,900
20			Lincoln	DENVER	NORTH CAROLINA	28037	1,402,450
21			Hillsborough	TAMPA	FLORIDA	33617	1,282,860
22			Hillsborough	TAMPA	FLORIDA	33619	1,272,860
23			Polk	LAKELAND	FLORIDA	33813	1,039,400
24			Pasco	WESLEY CHAPEL	FLORIDA	33543	1,030,050
25			Iredell	MOORESVILLE	NORTH CAROLINA	28117	902,500
26			Polk	LAKELAND	FLORIDA	33815	867,800
27			Broward	HOLLYWOOD	FLORIDA	33021	865,700
28			Los Angeles	ENCINO	CALIFORNIA	91436	798,100
29			Hillsborough	TAMPA	FLORIDA	33604	793,350
30			Pasco	NEW PORT RICHEY	FLORIDA	34652	583,400
31			Ravalli	FLORENCE	MONTANA	59833	362,000
32			Hillsborough	TAMPA	FLORIDA	33619	162,000
33			Broward	DEERFIELD BEACH	FLORIDA	33441	112,600
34			Hillsborough	TAMPA	FLORIDA	33614	49,600
							2,043,041

98,566,711

Date Prepared: 03/07/2007 Source: ARCOS

National Forensic Laboratory Information System (NFLIS)

State and Local Law Enforcement Cases



Yearly estimates are published in NFLIS Annual Report (2001-2011) and NFLIS 2012 Midyear Report

NFLIS Drug Cases
(State and Local)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Jan-June 2012
Methadone	2,145	3,508	4,986	5,594	6,409	7,053	7,778	7,500	8,459	8,173	7,658	3,613
Oxycodone	10,926	13,906	15,396	16,818	16,721	18,456	22,960	27,207	37,489	47,088	46,065	20,787
Hydrocodone	11,386	14,756	16,933	19,147	22,259	25,272	31,007	32,985	39,326	40,206	38,765	18,033
Morphine	1,725	2,180	2,687	2,801	3,171	3,637	4,337	4,757	5,986	5,986	6,931	3,696
Codeine	2,959	3,070	3,116	3,354	2,743	2,787	2,962	3,026	3,439	3,390	3,530	1,599
Meperidine	465	425	343	268	258	294	283	251	244	167	151	64

Yearly estimates published in NFLIS Annual Report (2001-2011) and NFLIS 2012 Midyear Report

NFLIS Data

Federal, State and Local Cases:

	2006	2007	2008	2009	2010	2011	2012*
MEPERIDINE	312	301	316	237	193	150	84
OXYMORPHONE	17	45	129	344	781	2,689	1,881
CODEINE	2,631	2,707	3,038	3,177	3,181	3,014	2,194
HYDROMORPHONE	1,333	1,570	1,680	2,024	2,355	2,675	2,969
METHADONE	6,640	7,262	7,485	7,922	7,645	7,059	4,890
MORPHINE	3,563	4,189	4,930	6,037	6,385	6,690	5,849
HYDROCODONE	24,984	30,637	33,731	38,082	39,381	36,512	25,926
OXYCODONE	17,927	22,425	28,756	38,330	48,197	46,296	33,196

Federal, State and Local Reports:

	2006	2007	2008	2009	2010	2011	2012*
MEPERIDINE	342	332	339	274	268	159	94
OXYMORPHONE	17	47	139	387	868	3,045	2,086
CODEINE	2,978	3,059	3,478	3,629	3,646	3,398	2,455
HYDROMORPHONE	1,426	1,687	1,827	2,234	2,609	2,990	3,272
METHADONE	7,124	7,899	8,400	8,783	8,481	7,737	5,351
MORPHINE	4,036	4,685	5,731	7,104	7,440	7,768	6,657
HYDROCODONE	27,927	34,449	38,422	44,074	45,625	42,751	29,944
OXYCODONE	21,155	26,478	34,652	46,575	60,223	57,668	40,973

*2012 data is still being submitted, queried on 1/22/2013

New Felony Offense
Internet Trafficking
10/15/2008

- 21 USC 841(h)(1): It shall be unlawful for any person to knowingly or intentionally:

(A) deliver, distribute, or dispense a controlled substance by means of the Internet, except as authorized by this title; or

(B) aid or abet any violation in (A)

What has been the reaction????

Per Se Violations

Automatic Violation of the CSA if any of the following occurs:

- No in-person medical evaluation by prescribing practitioner
- Online pharmacy not properly registered with *modified registration.*
- Website fails to display required information

Traffickers Adapt

Switch to overseas sites outside of U.S. regulatory authority

Non-controlled drugs

Current CSA Registrant Population

Total Population: 1,469,821

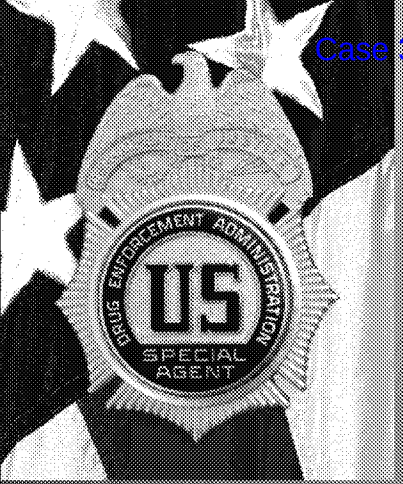
- Practitioner - 1,148,956
- Mid-Level Practitioner - 222,773
- Pharmacy - 68,526
- Hospital/Clinic - 15,860
- Teaching Institution - 315
- Manufacturer - 544
- Distributor - 919
- Researcher - 9,642
- Analytical Labs - 1,511
- NTP - 1,310
- Importer/Exporter - 474
- ADS Machine - 404
- Chemicals - 1,056

2/08/2013

SOOOO…How many have applied for registration for Internet Pharmacy Operations?????

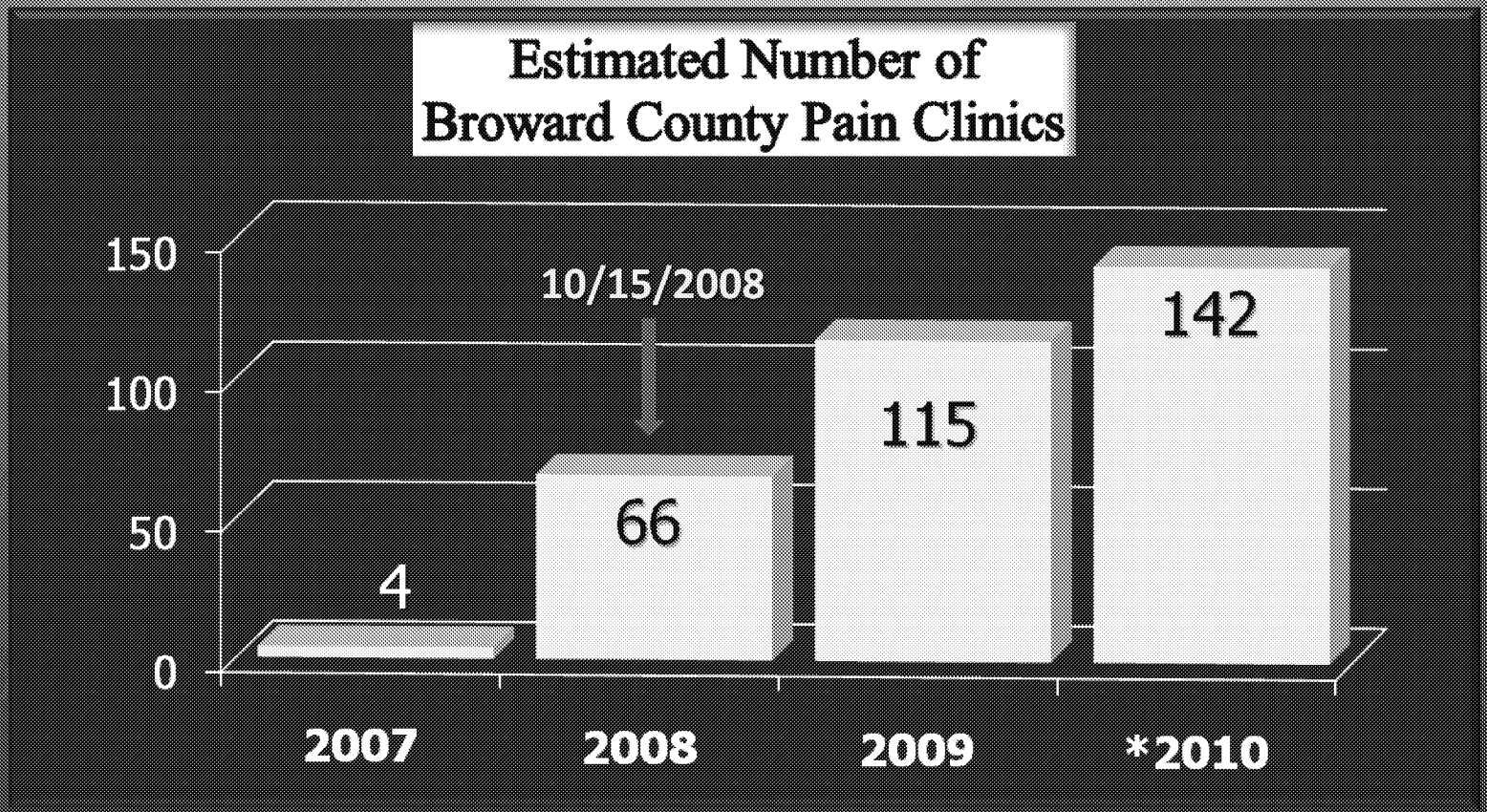
39 applications filed
20 withdrawn
7 applications filed in error
12 pending
No applications approved thus far

What took the place of Internet Medical Care and Internet CS pharmaceutical Distribution?



Pain Clinics

Explosion of South Florida Pain Clinics



As of June 4, 2010, Florida has received 1,118 applications and has approved 1026

*As of May 14, 2010, Broward 142; Miami-Dade 79; Palm Beach 111

Explosion of South Florida Pain Clinics – All Providers (Current and Closed)

- All/State of Florida: 1,501

- Broward County: 236
- Miami-Dade County: 156
- Palm Beach County: 161
- Hillsborough County (Tampa area): 214

As of February 12, 2013.

Explosion of South Florida Pain Clinics – Currently Licensed Providers

- All/State of Florida: 390

- Broward County: 60
- Miami-Dade County: 46
- Palm Beach County: 32
- Hillsborough County (Tampa area): 63

As of February 12, 2013.

NFLIS – Federal, State, and local cases reported

	Hydrocodone	Oxycodone
2002	9,376	8,288
2003	12,130	9,715
2004	16,401	13,492
2005	21,190	14,643
2006	24,984	17,927
2007	30,637	22,425
2008 (Ryan-Haight)	33,731	28,756
2009	38,082	38,330
2010	39,380	48,197
2011	36,954	46,452
2012	28,695*	35,781*

Medical Care ?

- Many of these clinics are prescription/dispensing mills.
- Minimal practitioner/patient interaction

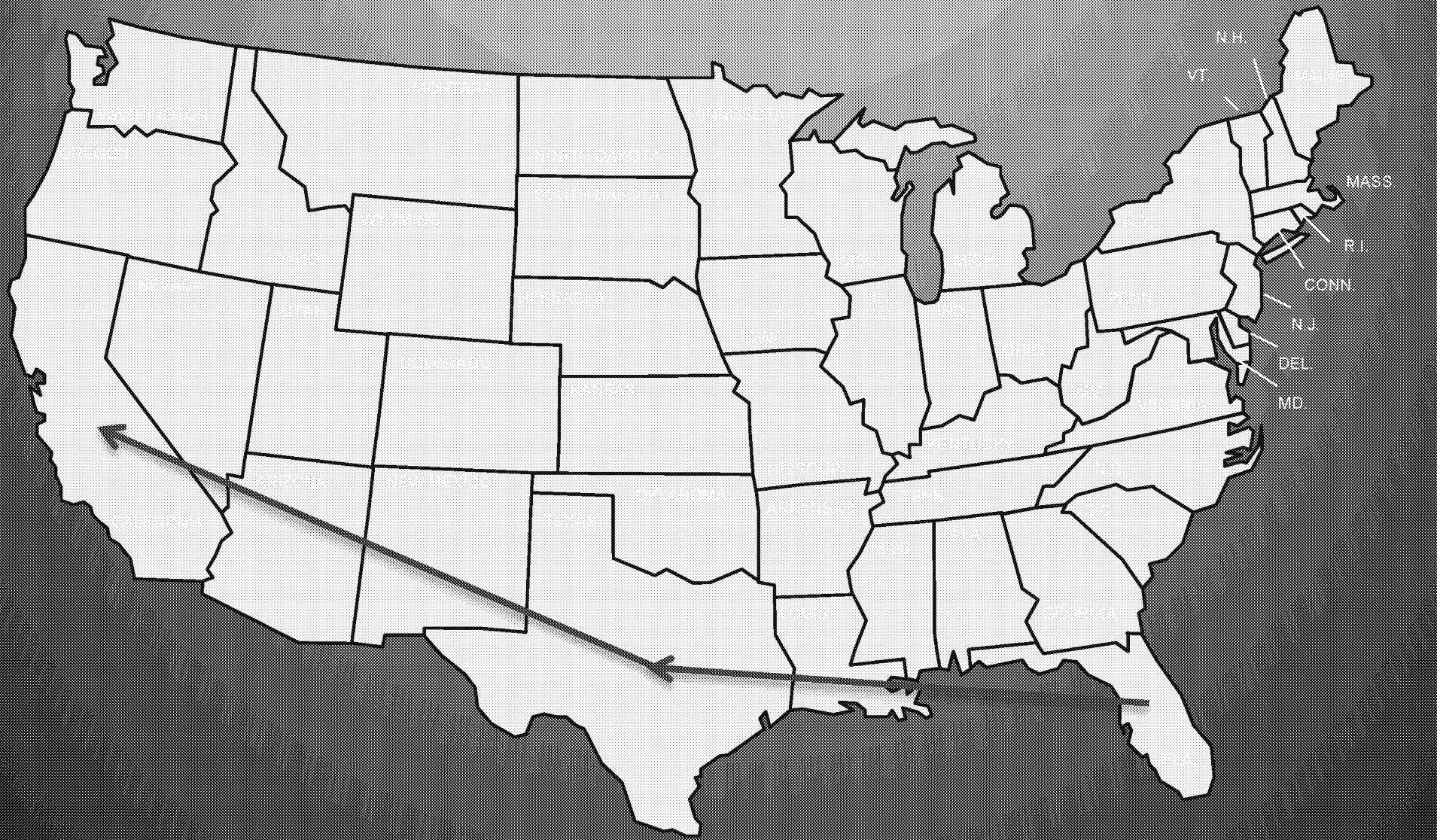
Increased Law Enforcement Pressure

- Clinics migrating north and west
- Funded by owners in Florida

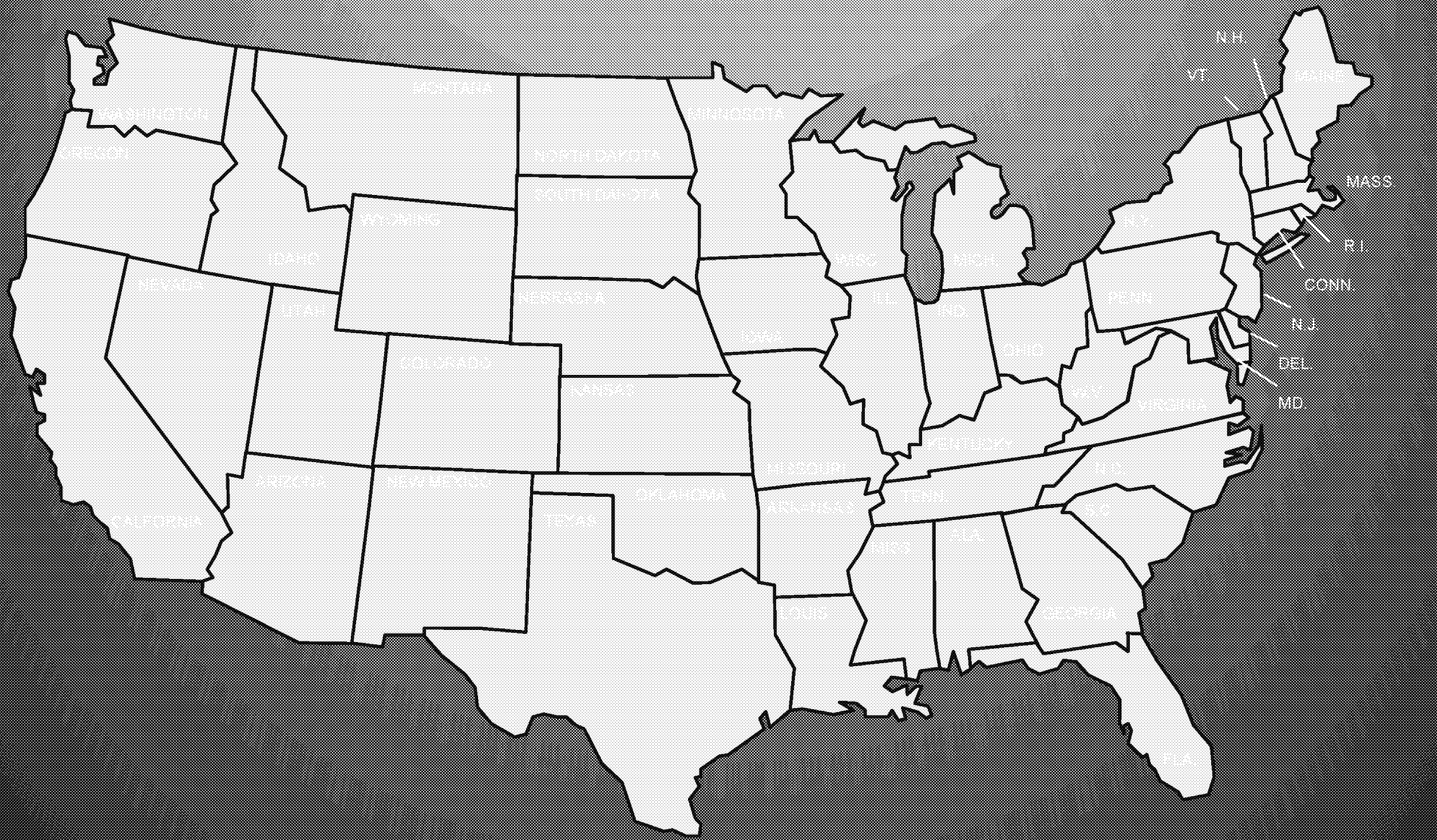
MIGRATION OF PAIN CLINICS

MIGRATION OF PAIN CLINICS

MIGRATION OF PAIN CLINICS



MIGRATION OF PAIN CLINICS



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